MAGNETIC DISK PROTECTION MECHANISM, COMPUTER SYSTEM COMPRISING PROTECTION MECHANISM, PROTECTION METHOD FOR MAGNETIC DISK, AND PROGRAM FOR PROTECTION METHOD

ABSTRACT

A magnetic disk device protection mechanism comprises a sensor that acquires information on changes in the environment of a magnetic disk device, a sensor driver, a shock manager that analyzes the information acquired by the sensor driver together with a history of the information to determine the status where the magnetic disk device is used to predict a shock, and an HDD filter driver that controls operations of the magnetic disk device including the escape of a magnetic head. The magnetic disk device can also comprise a diagnosis processing section that operates if a shock has occurred actually, to check whether or not the magnetic head could have completely escaped before the occurrence of this shock to carry out diagnosis as to whether or not a fault is occurring in the magnetic disk.